



Operating Instructions EM2050 & EM3550

Innovative - Global - Solutions



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Features

Codes

- One manager: can open, change code, manage users, program time delay and can audit users and lock
- Up to nine (9) users: can open and change their own code. (if programmed)

Codes length fixed to six (6) digits. If the number of installed users is higher than four (4) and silent alarm feature is active, combination length is automatically set to seven (7) digits (VdS requirement). When “Dual Combo” is selected codes length is always six (6) digits.

Dallas i-button

A Dallas i-button can be associated to any user during user installation (function #1) by simply entering an i-button after the code has been entered. User will then be identified by combination plus i-button.

Time Delay

- Time delay programmable from 0 (no time delay) up to 99 minutes. Open window from 1 up to 9 minutes.

During time delay enabled LED flashes at two seconds intervals. Open window is Indicated by LED then buzzer at 1 seconds intervals alternately (once LED, once beep)

Battery low warning

- If battery is low (< 6V) during motor activation, multiple beeps.

Audit

- Users current status can be audited through the keypad with function seven (7)
- A <<basic audit>> file (last 100 openings, no time & date) is recorded on the standard lock board. “Basic audit” can be downloaded to an i-button on the keypad with function seven (7).
- An <<extended audit>> file (last 500 openings with time & date) can be implemented on a <<satellite>> board to be connected to the alarm/battery additional connector on lock standard board. “Extended audit” can only be extracted from the “satellite” board directly to PC through a dedicated interface.

Features

Lock configuration

Lock configuration is done by PC.

Auto-detect

- Combination length depends on the number of installed users and on other options (silent alarm and/or dual mode).
- TD override user #9 – When TD is active, user # 9 always override TD in “dual mode”
- Extended audit – If “extended audit” board is detected, last 500 events with time and date will be stored into the “satellite” board memory.
- Extended I/O – If “extended I/O” board is detected, the following input/output signal are available:
 - Silent alarm – output is triggered for 0,5 sec.
 - Disable input – when input is “high” lock cannot be opened.
 - Time Delay remote override – when input is “high”, time delay is by-passed.
 - Lock bolt status – signal is close when lock bolt is closed and it opens when lock bolt is open
 - Time delay counting start – output is triggered for 0,5 sec when time delay starts counting
 - Open window counting start – output is triggered for 0,5 sec when open window starts counting
 - Low battery – output is triggered for 0,5 sec when opening with low battery.
 - Penalty – output is triggered for 0,5 sec when penalty time starts.

User manual

♪♪ = Double signal, ♪ = Long signal, ☼ = Light (LED) flashes, * = Light (LED) stays on,
① = Number on entry, ⌂ = Press and hold till ♪♪ *, ♫ = Listen, ⓘ = i-button

General

The lock operates with a numeric 6-digit or 7-digit code. Each key press is confirmed with an audio and light signal (♪ and ☼).

After entry of a valid code a double signal follows (♪♪). An invalid entry is followed by a long signal (♪). After 10 seconds without entry, an already entered part of the code is cancelled. If your code is programmed with a key insert key in key reader after the last digit of your code.

For example: ①①①①①① ♪♪ ⓘ ♪♪

Open standard mode

Enter code: i.e. 1-1-1-1-1-1
Unlock door and open. If not opened within 3 seconds, the lock secures automatically.

For example:

①①①①①① ♪♪

Open dual combo

Two users are required to open with dual combo.
For example: 1-1-1-1-1-1 and 2-2-2-2-2-2
unlock door and open. If not opened within 3 seconds, the lock secures automatically.

For example:

①①①①①① ♪♪

AND

②②②②②② ♪♪

Open with time delay

After code entry, time delay starts, recognizable on light signal flashes ☼ at two-second interval.
At the end of the delay period the open window starts, the light signal flashes and the lock beeps at 1-second interval alternately (once light ☼, once beep ♪).

To open the lock, a valid code has to be entered again during the open window. If the open window expires without the lock being opened, the lock is secured again with the time delay.

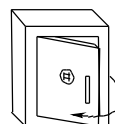
For example:

①①①①①① ♪♪

☼ every 2 seconds (time delay)
After the time delay
♪ 1 second and ☼ 1 second
(open window)

①①①①①① ♪♪

If lock is set to dual combo open with a different code in the open window.



To Delete current action: press random key.

To Extend delay time: enter valid code. The delay period will start again.

Open with time delay override

Enter a code, the time delay will start, then enter code provided to user 9 (time delay override code).

For example: user 1: 1-1-1-1-1-1 ♪♪ time delay starts

user 9: 9-9-9-9-9-9 ♪♪

Unlock door and open. If not opened within 3 seconds, the lock secures automatically.

For example:

①①①①①① ♪♪

And

⑨⑨⑨⑨⑨⑨ ♪♪

User manual

Change code (with safe door open)

Press and hold key "0" until double signal. The light remains on during the following actions.

- Enter old code 🎵
- Enter new code 🎵
and repeat new code 🎵

For example: "0" till double signal and light stays on

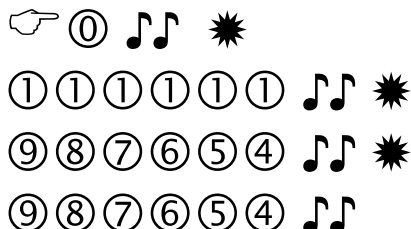
Old code 1-1-1-1-1-1 (double signal)

New code 9-8-7-6-5-4 (double signal)

New code 9-8-7-6-5-4 (double signal)

In case of entry errors (long signal 🎵), the old code remains valid.

For example:



Activate silent alarm:

In case of a hold up situation, a silent alarm can be sent by entering the last code digit +1.

For example: valid Code 9-8-7-6-5-4, alarm will be sent by entering 9-8-7-6-5-5.
This code works as a valid code.

For example:



Silent alarm

Manager instructions

♪♪ = Double signal, ♪ = Long signal, ☼ = Light (LED) flashes, * = Light (LED) stays on,
① = Number on entry, ☞ = Press and hold till ♪♪ *, ⓘ = Listen, ⓘ = i-button (key)

General

The lock operates with a numeric 6-digit or 7-digit code. Each key press is confirmed with an audio and light signal (♪ and ☼). After entry of a valid code a double signal follows (♪♪). An invalid entry is followed by a long signal (♪). After 10 seconds without entry, an already entered part of the code is cancelled. If your code is programmed with a key insert key in key reader after the last digit of your code.

For example: ①②③④⑤⑥ ♪♪ ⓘ ♪♪

Open

See User instructions

Change code (with safe door open)

See User instructions

Activate user

Press and hold key "1" until double signal. The light remains on during the following actions.

- Enter manager code ♪♪
- Enter user ID 1-9 ♪♪ (only if more than 1 user is installed)
- Enter user code ♪♪
- Repeat user code ♪♪

For example: to activate user 1:

"1" till ♪♪ and light stays on

Manager code 1-2-3-4-5-6 ♪♪

User ID 1 ♪♪ (only if more than 1 user is installed)

User code 1-1-1-1-1-1 ♪♪

User code 1-1-1-1-1-1 ♪♪

For example:

☞ ① ♪♪ *

①②③④⑤⑥ ♪♪ *

① ♪♪ * (only if more than 1 user is installed)

①①①①①① ♪♪ *

①①①①①① ♪♪

Activate user with key

Press and hold key "1" until double signal. The light remains on during the following actions.

- Enter manager code ♪♪
- Enter user ID 1-9 ♪♪
- Enter user code after last digit ♪♪ insert key in key reader ♪♪
- Repeat user code ♪♪ and insert key ♪♪

For example: to activate user 1:

"1" till ♪♪ and light stays on

Manager code 1-2-3-4-5-6 ♪♪

User ID 1 ♪♪

User code 1-1-1-1-1-1 ♪♪ key ♪♪

User code 1-1-1-1-1-1 ♪♪ key ♪♪

For example:

☞ ① ♪♪ *

①②③④⑤⑥ ♪♪ *

① ♪♪ *

①①①①①① ♪♪ ⓘ ♪♪ *

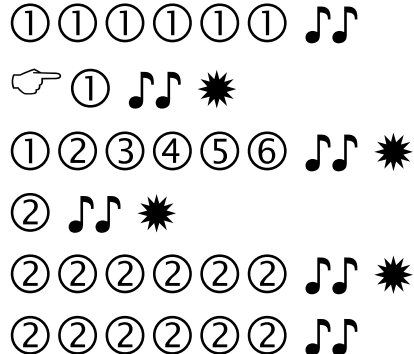
①①①①①① ♪♪ ⓘ ♪♪

Manager Instructions

Activate user in dual mode

- Enter user code 🎵
- Press and hold** key "1" until double signal.
- Enter manager code 🎵
- Enter user ID 1-9 🎵
- Enter user code 🎵
- Repeat user code 🎵
- For example:** activate user 2: user 1 has been activated with
1-1-1-1-1-1 and the manager code is 1-2-3-4-5-6.
1-1-1-1-1-1 🎵
Press "1" till 🎵
1-2-3-4-5-6 🎵
2 🎵
2-2-2-2-2-2 🎵
2-2-2-2-2-2 🎵

For example:



Disable/enable users (bulk) not active in dual mode!

- Press and hold** key "2" until double signal. The light remains on during the following actions.
- Enter manager code 🎵
- All users are disabled.

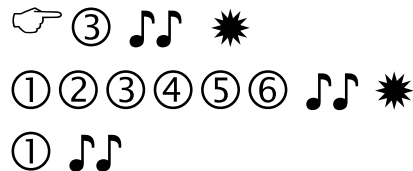


To enable all users repeat procedure.

Delete users

- Press and hold** key "3" until double signal. The light remains on during the following actions.
- Enter manager code 🎵
- Enter user ID 🎵
- User is deleted.
- For example:** "3" till double signal and light stays on. Manager code 1-2-3-4-5-6 🎵
User ID 1 🎵

For example:

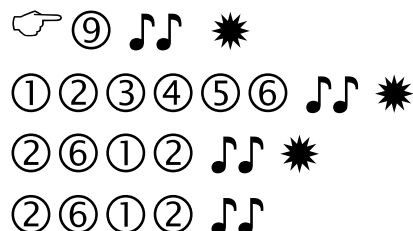


To activate user again please refer to function 'activate user'
Please note that new user code differs from prevs code!!

Time delay

- Press and hold** key "9" until double signal. The light remains on during the following actions.
- Enter manager code 🎵
- Enter time delay and open window time
- Repeat values 🎵
- For example:** "9" till double signal and light stays on
Manager code 1-2-3-4-5-6 🎵
2612 for 26minutes time delay and 12minutes open window 🎵
Repeat values 🎵

For example:



Note: decreasing the time delay value can only be done in open window time.
Increasing can be done at any time.

Note: decreasing the time delay value can only be done in open window time.
Increasing can be done at any time

Manager instructions

Audit users

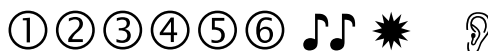
Press and hold key "7" until double signal. The light remains on during the following actions.

Listen to tone

signals

- Enter manager code ♪♪
- Enter 1,2,3,4,5,6,7,8,9 and 0 to stop
- double signal ♪♪ = User active with code
- one signal ♪ = User active with out code (or disabled)

Long signal ♪ = User not active



♪♪ = User active with code

♪ = User active with out code (or disabled)

♪ = User not active

Audit lock (only if 2 or more users are installed)

Press and hold key "7" until double signal. The light remains on during the following action.

- Enter manager code ♪♪
- Insert i-button in key reader till double signal ♪♪

The audit file has been downloaded to the i-button

See procedure on page 8 for the L.O.G file.



DIALOG file

Description

EM2050 & EM3550 audit feature. A Basic audit file (last 100 openings, with out time and date) is recorded in the lock board memory.. This "Basic audit" can be downloaded to a Dallas i-button (DS1996L) via the entry Dallas key reader with function 7. The content of the i-button can then be displayed, saved and/or printed with a PC using a dallas I-button reader device such as DS9490 (USB device) and dedicated software.

Open the DIALOG file.



DIALOG

Lock configuration window

- "Read" button- read and display the content of an i-button "audit key".
- "Load" button- load and display a previously saved audit file.
- "Save" button- save displayed configuration and audit to a file.
- "Print" button - print displayed configuration and audit.

if an audit was not successful this pop-up will appear:



Audit window

Programming on PC

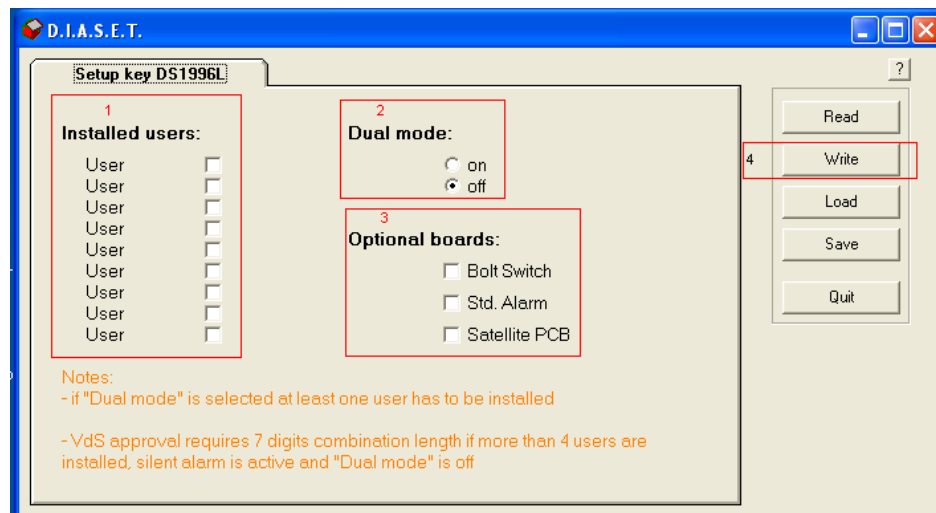
Description

The board must be configured from factory mode to “operational” using an i-button (DS1996L) by pressing and holding key 2 till double beep and LED on and then entering a properly written i-button (DS1996) setup key. If valid setup key, lock signals a double beep else a long beep. Manager factory combination (5-5-5-5-5-5) is automatically changed to the standard default for operational locks: 123456(7).

Diaset PC software

DIASET PC software is designed to properly write an i-button (setup key DS1996L) according to required configuration. The setup key can then be used to quickly setup the EM2050 and EM3550 locks from factory to “operational” mode.

Open the DIASET file



- 1) Click the box behind the users that need to be installed.
- 2) Choose dual mode if required.
- 3) Choose Bolt switch, Std. Alarm or Satellite PBC if required.
- 4) Choose Write to write program to i-button.

To program the lock Press ② till 🎵 insert i-button in key reader and wait till 🎵. **

Manager code is now set to: 123456(7)
To activate users see Manager manual.

**** Once a i-button has been downloaded to a lock, there is no possible way to reprogram or reset the lock!**

Trouble Shooting

Wrong code penalty:

After 4 consecutive invalid codes a time penalty of 5 minutes will start.

During the time penalty the light flashes every 10 seconds. Every entry is rejected by a long signal. By entering two more invalid codes the 5-minute time penalty will start again until a valid code is entered.

What if

... you hear a long beep after you have entered your combination and the lock does not open?

You are entering an invalid combination. Repeat the operation making attention you are entering the correct code.

... the light flashes every 10 seconds, and, when you push a button you hear a long beep?

You have entered a wrong code 4 times and the lock is in time penalty. Wait 5 minutes and try again.

Two more consecutive invalid codes will restart additional 5 minutes time penalty.

... you do not hear any beep when you push a button?

Replace the battery (use only 9V Duracell batteries). If the problem is not solved, call your service centre.

... you can open but you hear a long sequence of beeps after your combinations last digit?

The lock is warning you that the battery will need to be replaced soon.

(use only 9V Duracell batteries)

Information for the manager/users

How the lock is setup

Opening standard mode	6/7 digits
Dual combo	Yes/No
Time Delay	TD= min/ OW= min
Time Delay Override	Yes/No
Dallas- i-button (key)	Yes/No
Silent Alarm	Yes/No
Extended audit	Yes/No
Extended I/O	Yes/No

User #	User Name	Code provided	Key
1			Yes / No
2			Yes / No
3			Yes / No
4			Yes / No
5			Yes / No
6			Yes / No
7			Yes / No
8			Yes / No
9			Yes / No